ABSTRACT OF THE DISCLOSURE

A plasma processing apparatus, which is loaded with a substrate to be processed on the voltage-applied electrode side and is able to achieve a uniform plasma processing characteristic on a substrate surface by correcting distortion of an electric field at the edge portion and the distortion of plasma. The plasma processing apparatus introduces a processing gas into a processing chamber and excites a plasma in the processing chamber to carry out plasma processing on a substrate placed on a cathode electrode inside the processing chamber. The apparatus is provided with a ring that encompasses the outer peripheral edge portion of the substrate and is constructed such that a clearance is provided between its encompassing surface and the upper surface and the outer peripheral edge of the substrate.